

Water-Data Report 2008

**12210900 ANDERSON CREEK AT SMITH ROAD, NEAR GOSHEN, WA**

Puget Sound Basin  
Nooksack Subbasin

LOCATION.--Lat 48°49'58", long 122°20'16" referenced to North American Datum of 1927, in SW ¼ SE ¼ sec.30, T.39 N., R.4 E., Whatcom County, WA, Hydrologic Unit 17110004, on left bank on the downstream side of Smith Road bridge, 1.5 mi south of Goshen, and at mile 3.0.

DRAINAGE AREA.--8.96 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 200 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. No known diversions or regulation upstream of station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--10 years (water years 1999-2008) 20.6 ft<sup>3</sup>/s, 31.20 in/yr, 14,910 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 840 ft<sup>3</sup>/s, Nov. 24, 2004, gage height, 11.51 ft; minimum discharge, no flow many days in August and September 2002, 2003, and 2007.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 395 ft<sup>3</sup>/s, Dec. 3, gage height, 9.58 ft; minimum discharge, 0.09 ft<sup>3</sup>/s, Aug. 7, 8, gage height, 6.21 ft.

## 12210900 ANDERSON CREEK AT SMITH ROAD, NEAR GOSHEN, WA—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e7.0	4.5	4.3	21	25	38	20	11	3.5	1.2	0.52	1.8
2	e8.0	3.8	21	44	17	21	14	9.0	3.1	1.2	0.44	1.5
3	e6.0	5.6	257	43	9.9	18	12	11	7.3	1.4	0.42	1.3
4	7.3	6.7	134	52	6.9	17	11	12	55	1.5	0.29	1.1
5	5.4	5.1	68	44	25	13	11	12	22	1.3	0.22	1.0
6	3.9	4.6	44	29	25	12	14	10	65	1.5	0.16	0.93
7	6.5	5.3	30	20	39	12	27	9.5	25	1.2	0.13	0.83
8	10	9.4	24	18	28	16	22	7.9	14	0.91	0.11	0.71
9	5.3	20	14	22	50	14	20	6.8	32	0.82	0.24	0.66
10	4.2	22	9.7	69	78	26	20	7.4	49	0.75	0.81	0.60
11	23	14	6.9	79	53	66	15	32	19	0.65	0.55	0.57
12	13	23	6.0	70	46	45	17	15	12	0.57	0.34	0.56
13	6.2	25	13	119	49	30	26	15	9.2	0.54	0.28	0.55
14	4.5	19	29	111	30	40	17	45	7.3	0.46	0.23	0.52
15	3.9	17	58	92	22	56	15	30	5.8	0.42	0.21	0.49
16	4.5	48	49	49	28	40	12	19	4.6	0.39	0.18	0.48
17	5.2	32	47	33	21	52	10	14	3.9	0.37	0.14	0.48
18	5.1	19	40	22	16	41	11	11	3.7	0.32	0.22	0.52
19	37	11	85	36	13	29	9.7	8.8	3.3	0.32	0.44	0.62
20	32	6.9	59	27	12	29	8.1	15	2.9	0.30	1.1	0.87
21	17	4.2	36	15	11	35	6.7	13	2.7	0.24	4.3	1.4
22	56	2.9	45	10	10	27	5.9	9.5	2.5	0.23	2.1	0.87
23	28	2.2	55	8.2	9.6	107	5.8	8.0	2.3	0.23	1.4	0.70
24	22	1.8	51	7.1	8.9	59	5.2	6.8	2.1	0.24	2.5	0.59
25	19	1.5	34	4.2	7.7	29	5.1	5.6	2.0	0.20	3.0	0.65
26	12	6.0	60	5.6	7.2	27	4.5	5.4	1.8	0.15	1.8	0.74
27	8.6	31	40	9.1	8.0	21	6.2	5.0	1.7	0.18	2.3	0.64
28	6.9	18	86	5.9	11	20	12	4.4	1.6	0.19	2.0	0.56
29	6.3	12	69	7.0	20	52	39	4.1	1.4	0.23	2.7	0.51
30	5.5	6.1	42	13	---	31	17	3.7	1.3	0.32	3.1	0.47
31	4.8	---	22	38	---	27	---	3.4	---	0.28	2.2	---
<b>Total</b>	384.1	387.6	1,538.9	1,123.1	687.2	1,050	419.2	370.3	367.0	18.61	34.43	23.22
<b>Mean</b>	12.4	12.9	49.6	36.2	23.7	33.9	14.0	11.9	12.2	0.60	1.11	0.77
<b>Max</b>	56	48	257	119	78	107	39	45	65	1.5	4.3	1.8
<b>Min</b>	3.9	1.5	4.3	4.2	6.9	12	4.5	3.4	1.3	0.15	0.11	0.47
<b>Ac-ft</b>	762	769	3,050	2,230	1,360	2,080	831	734	728	37	68	46
<b>Cfs/m</b>	1.38	1.44	5.54	4.04	2.64	3.78	1.56	1.33	1.37	0.07	0.12	0.09
<b>In.</b>	1.59	1.61	6.39	4.66	2.85	4.36	1.74	1.54	1.52	0.08	0.14	0.10

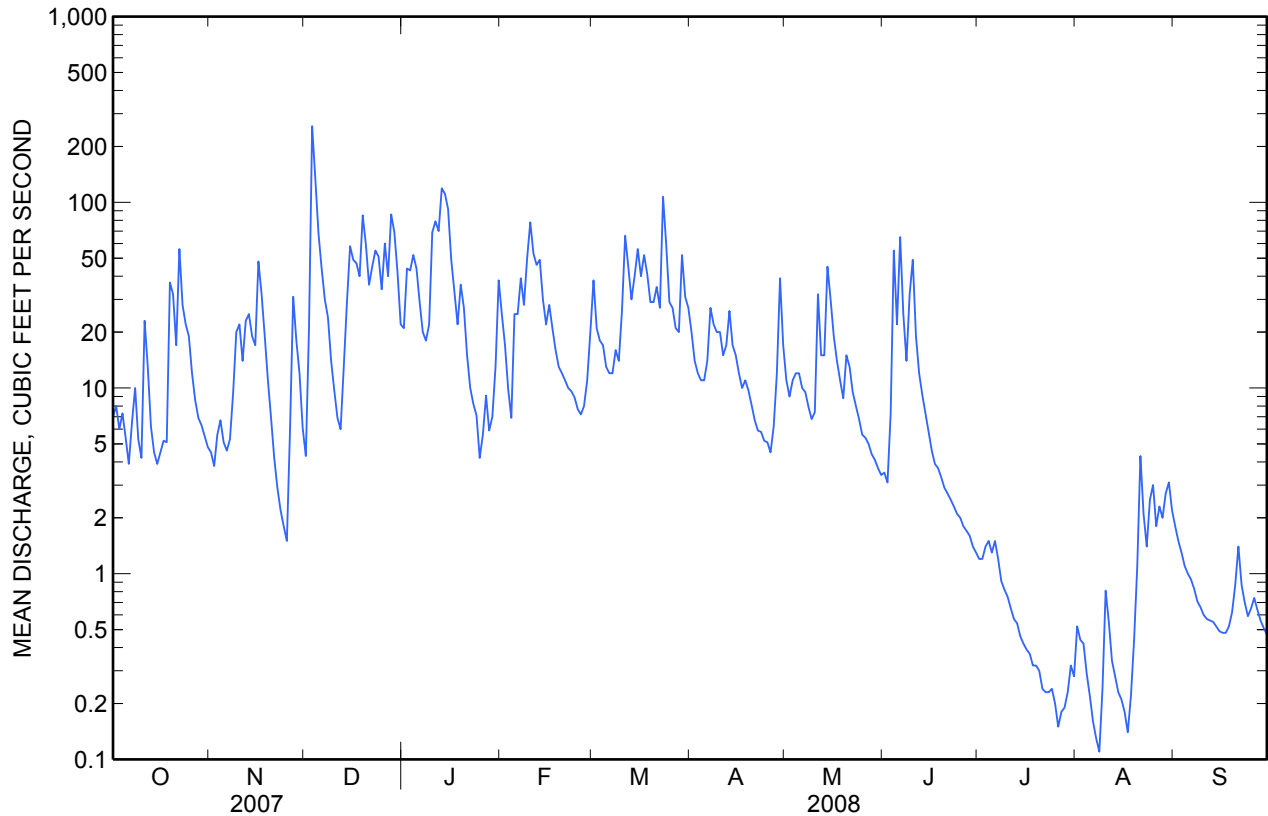
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	10.2	38.5	43.9	50.7	31.0	32.5	21.3	9.61	6.55	1.39	0.69	1.04
<b>Max</b>	39.9	82.9	70.6	88.6	62.1	54.7	50.4	28.0	16.7	5.03	2.00	4.05
<b>(WY)</b>	(2004)	(2005)	(2002)	(2006)	(1999)	(2007)	(2005)	(2000)	(2000)	(1999)	(2004)	(2004)
<b>Min</b>	0.32	5.56	19.9	27.4	12.4	14.2	5.29	1.81	1.29	0.27	0.10	0.08
<b>(WY)</b>	(2007)	(2003)	(2003)	(2001)	(2005)	(2006)	(2004)	(2005)	(2005)	(2006)	(2002)	(2003)

12210900 ANDERSON CREEK AT SMITH ROAD, NEAR GOSHEN, WA—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1999 - 2008	
Annual total	6,838.91		6,403.66			
Annual mean	18.7		17.5		20.6	
Highest annual mean					25.1	
Lowest annual mean					10.7	
Highest daily mean	267	Mar 24	257	Dec 3	499	Nov 19, 2003
Lowest daily mean	0.00	Aug 17	0.11	Aug 8	0.00	Aug 15, 2002
Annual seven-day minimum	0.00	Sep 9	0.20	Jul 22	0.00	Aug 15, 2002
Maximum peak flow					790	
Maximum peak stage					11.30	
Instantaneous low flow					0.00	
Annual runoff (ac-ft)	13,560		12,700		14,910	
Annual runoff (cfs)	2.09		1.95		2.30	
Annual runoff (inches)	28.39		26.59		31.20	
10 percent exceeds	52		46		55	
50 percent exceeds	5.5		9.1		7.1	
90 percent exceeds	0.12		0.48		0.31	



**12210900 ANDERSON CREEK AT SMITH ROAD, NEAR GOSHEN, WA—Continued****WATER-QUALITY RECORDS**

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May to September 2008.

INSTRUMENTATION.--Design Analysis H-350XL/355 Smart Gas System, H-377 Thermistor Temperature Probe with 12 VDC power supply. The H350XL/355 and H-377 orifice tubing is housed in one inch flexible conduit which is anchored in rip-rap and housed in a two inch galvanized steel pipe.

REMARKS.--Temperature records good.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum recorded, 20.9°C, June 30, 2008; minimum recorded 4.7°C, May 2, 2008.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 20.9°C, June 30; minimum recorded, 4.7°C, May 2.

**TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
October			November			December			January			
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

## 12210900 ANDERSON CREEK AT SMITH ROAD, NEAR GOSHEN, WA—Continued

 TEMPERATURE, WATER, DEGREES CELSIUS  
 WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	---	---	---	8.4	5.9	7.0
2	---	---	---	---	---	---	---	---	---	9.2	4.7	7.0
3	---	---	---	---	---	---	---	---	---	9.0	7.0	7.9
4	---	---	---	---	---	---	---	---	---	10.9	6.8	8.6
5	---	---	---	---	---	---	---	---	---	11.5	6.9	9.1
6	---	---	---	---	---	---	---	---	---	11.0	7.3	9.0
7	---	---	---	---	---	---	---	---	---	9.4	7.5	8.2
8	---	---	---	---	---	---	---	---	---	8.9	6.8	7.7
9	---	---	---	---	---	---	---	---	---	10.7	5.4	7.9
10	---	---	---	---	---	---	---	---	---	8.8	7.4	8.2
11	---	---	---	---	---	---	---	---	---	8.8	7.2	8.0
12	---	---	---	---	---	---	---	---	---	8.6	6.3	7.5
13	---	---	---	---	---	---	---	---	---	8.6	7.2	7.9
14	---	---	---	---	---	---	---	---	---	9.9	8.3	9.1
15	---	---	---	---	---	---	---	---	---	12.1	8.8	10.2
16	---	---	---	---	---	---	---	---	---	13.8	8.6	11.0
17	---	---	---	---	---	---	---	---	---	14.6	10.2	12.4
18	---	---	---	---	---	---	---	---	---	15.0	11.4	13.2
19	---	---	---	---	---	---	---	---	---	13.0	11.7	12.4
20	---	---	---	---	---	---	---	---	---	12.1	10.2	11.5
21	---	---	---	---	---	---	---	---	---	11.4	9.3	10.2
22	---	---	---	---	---	---	---	---	---	10.1	9.2	9.7
23	---	---	---	---	---	---	---	---	---	10.9	8.7	9.8
24	---	---	---	---	---	---	---	---	---	14.9	9.7	12.1
25	---	---	---	---	---	---	---	---	---	15.9	12.0	13.9
26	---	---	---	---	---	---	---	---	---	14.2	12.5	13.3
27	---	---	---	---	---	---	---	---	---	14.4	11.9	13.1
28	---	---	---	---	---	---	---	---	---	15.8	12.4	13.9
29	---	---	---	---	---	---	---	---	---	13.8	10.9	12.0
30	---	---	---	---	---	---	---	---	---	12.0	10.0	11.0
31	---	---	---	---	---	---	---	---	---	13.3	9.2	11.3
Month	---	---	---	---	---	---	---	---	---	15.9	4.7	10.1

## 12210900 ANDERSON CREEK AT SMITH ROAD, NEAR GOSHEN, WA—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	12.2	11.1	11.7	20.3	16.9	18.4	16.7	13.8	15.2	13.2	10.8	12.1
2	12.2	10.5	11.3	20.0	16.0	18.0	16.4	15.0	15.6	13.2	10.7	12.0
3	11.4	10.4	10.9	18.5	16.4	17.2	16.5	13.5	15.0	13.6	11.2	12.5
4	10.8	9.6	10.2	18.4	15.7	17.0	17.6	14.0	15.9	14.1	11.7	12.9
5	9.9	9.4	9.6	17.1	15.8	16.5	18.5	15.0	16.9	13.7	12.4	13.0
6	10.3	9.1	9.6	17.7	15.1	16.2	19.1	15.9	17.6	15.2	13.4	14.1
7	10.5	9.1	9.6	18.4	14.1	16.1	19.4	16.6	18.0	15.3	12.7	14.0
8	11.2	8.8	9.8	19.0	14.6	16.7	18.7	16.4	17.6	15.0	12.7	13.9
9	10.0	8.7	9.3	19.5	15.5	17.3	17.4	16.3	16.7	15.4	13.6	14.2
10	9.2	8.1	8.7	17.6	15.3	16.4	16.9	15.4	16.1	14.3	11.8	13.1
11	9.8	8.9	9.3	18.0	13.5	15.7	17.4	14.3	15.8	14.4	11.7	13.0
12	11.9	9.1	10.2	18.8	14.2	16.4	17.3	14.5	16.0	14.8	12.3	13.5
13	12.5	10.0	11.1	19.2	15.5	17.3	18.5	16.1	17.2	14.3	11.9	13.1
14	12.5	9.8	10.9	18.7	15.6	17.2	19.2	16.0	17.6	14.3	11.7	13.0
15	13.1	9.3	11.2	18.5	14.9	16.7	19.9	17.4	18.7	14.5	12.0	13.3
16	13.7	9.3	11.6	18.3	14.9	16.7	20.3	17.4	18.9	14.5	12.1	13.4
17	12.6	10.5	11.6	18.0	15.1	16.6	20.0	18.0	18.9	14.4	12.5	13.5
18	12.6	10.6	11.5	17.0	15.1	16.0	18.9	17.7	18.3	13.8	12.7	13.2
19	12.8	9.6	11.2	17.7	14.4	16.0	18.4	17.1	17.7	13.6	13.2	13.4
20	14.2	10.8	12.5	17.8	14.6	16.3	17.6	15.9	16.8	13.4	12.7	13.1
21	13.3	12.0	12.7	18.5	15.3	16.9	15.9	14.2	15.0	13.5	12.4	12.9
22	15.2	12.1	13.4	18.0	16.0	16.9	15.8	12.9	14.4	13.1	11.8	12.6
23	14.1	10.9	12.6	16.7	15.4	16.1	17.0	14.2	15.6	11.8	9.9	11.1
24	15.7	11.6	13.4	17.8	14.8	16.2	16.2	15.1	15.5	11.9	11.2	11.6
25	15.6	11.5	13.5	18.0	15.2	16.6	15.5	13.8	14.6	12.7	11.8	12.2
26	14.4	12.2	13.3	18.1	15.6	16.8	15.3	13.3	14.2	13.5	12.2	12.8
27	16.4	11.4	13.7	17.7	16.2	16.8	14.2	13.0	13.7	13.9	12.6	13.1
28	18.5	13.1	15.6	17.6	14.8	16.2	14.2	13.4	13.8	12.9	10.9	11.9
29	20.0	15.2	17.4	16.5	15.5	15.8	15.3	14.1	14.7	12.3	10.3	11.3
30	20.9	17.0	18.7	15.8	14.5	15.1	14.3	12.6	13.5	12.5	10.7	11.6
31	---	---	---	14.6	13.3	14.1	13.2	11.4	12.3	---	---	---
Month	20.9	8.1	11.9	20.3	13.3	16.5	20.3	11.4	16.1	15.4	9.9	12.8